

FIG. 1

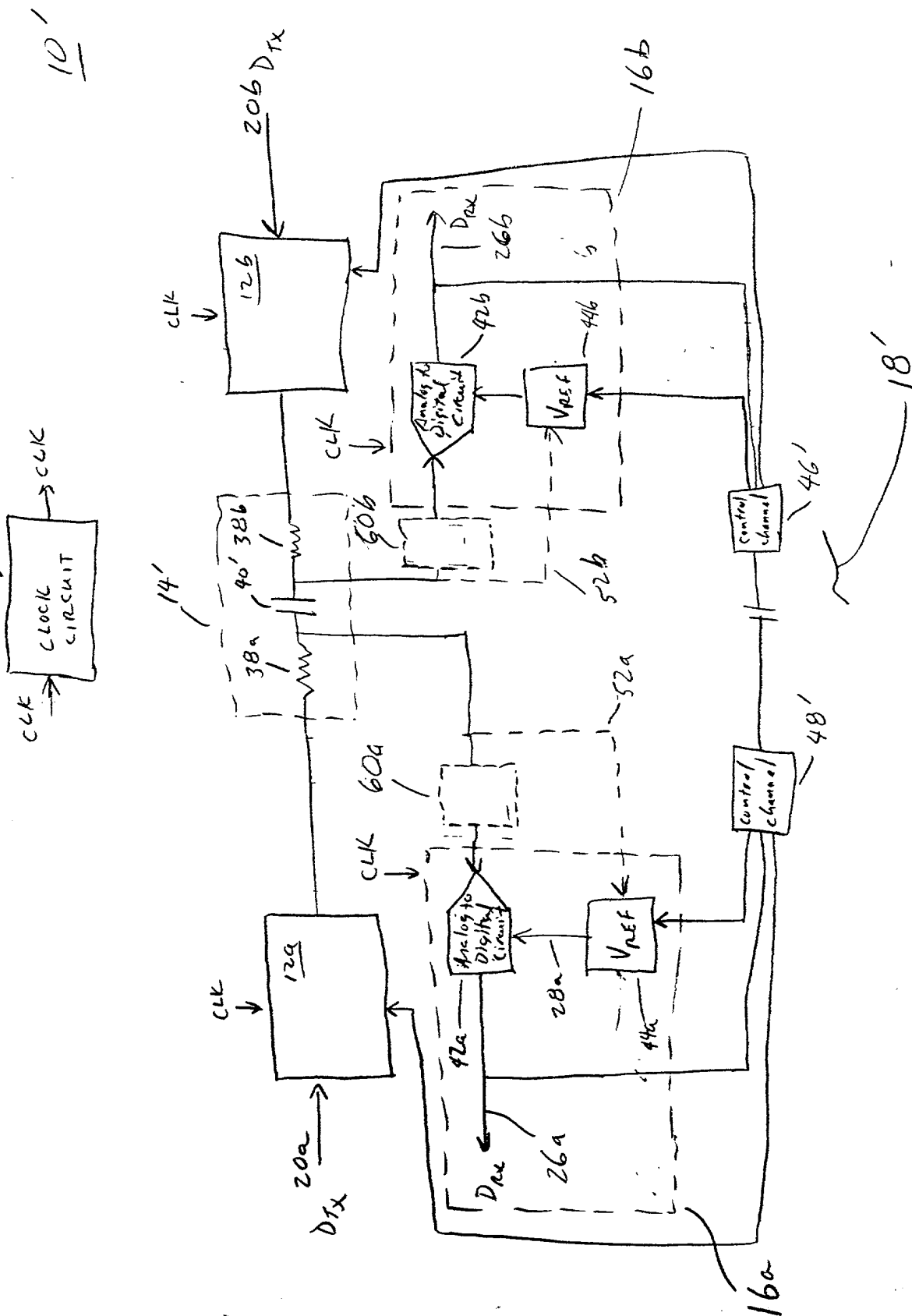


FIG. 2

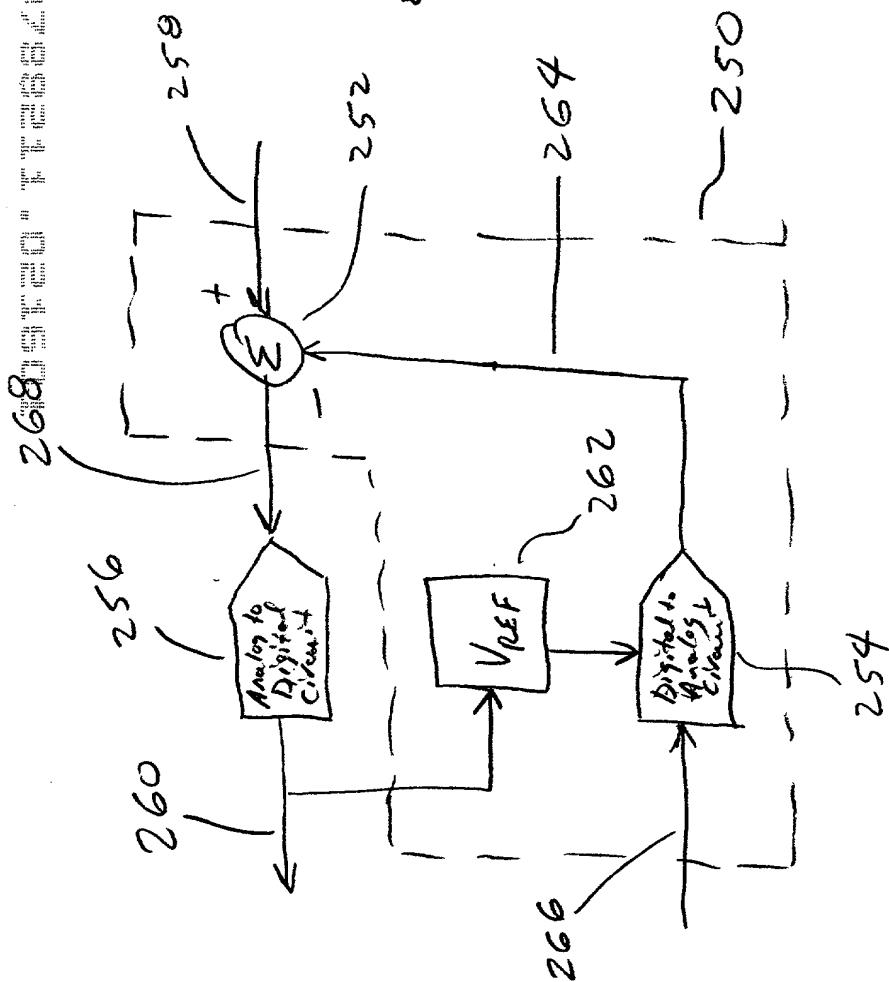


FIG. 3

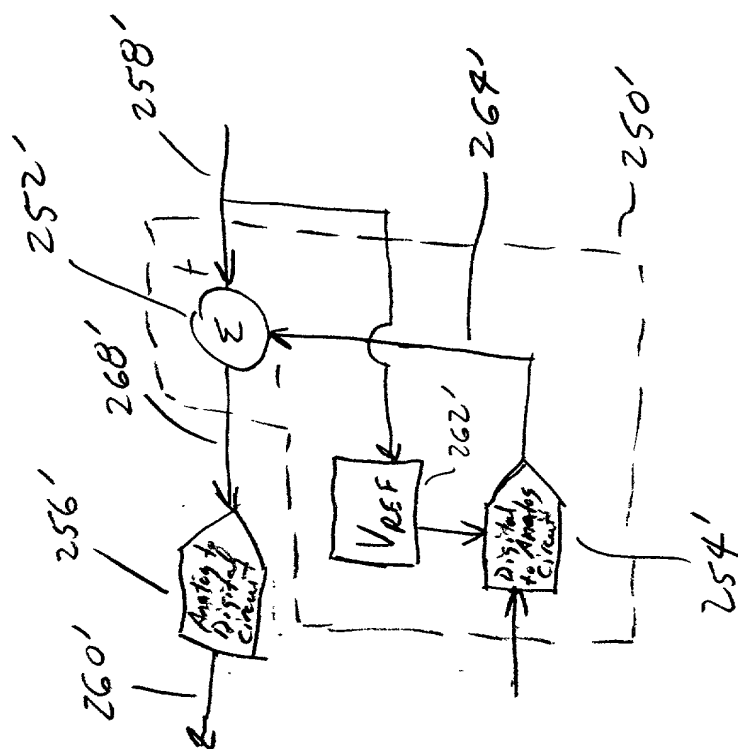


FIG. 4

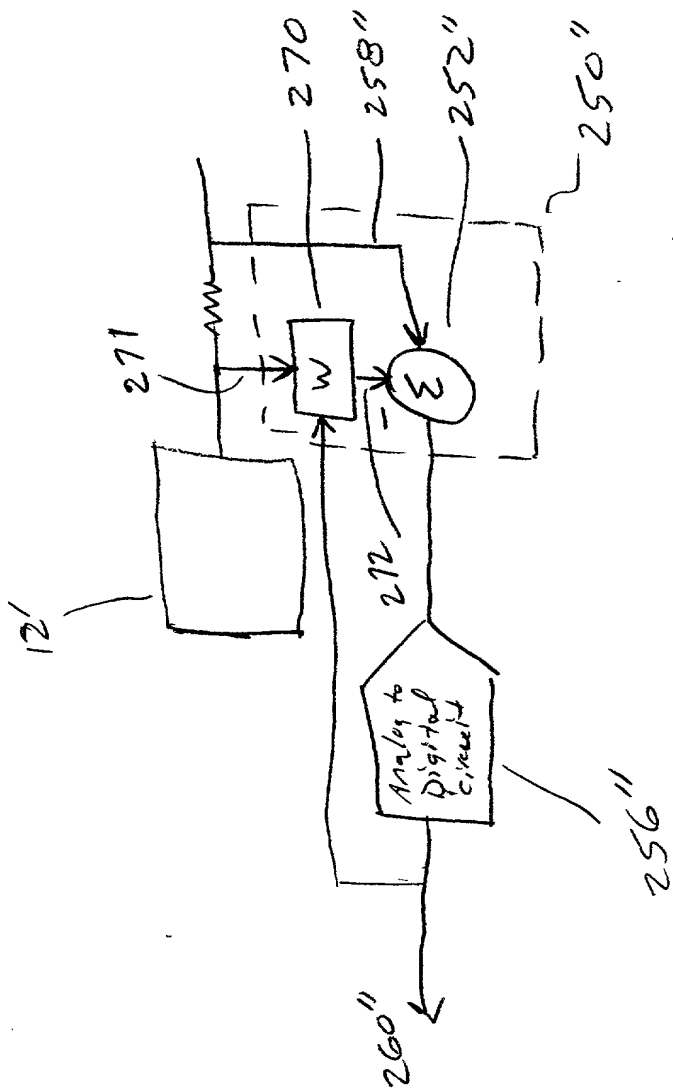
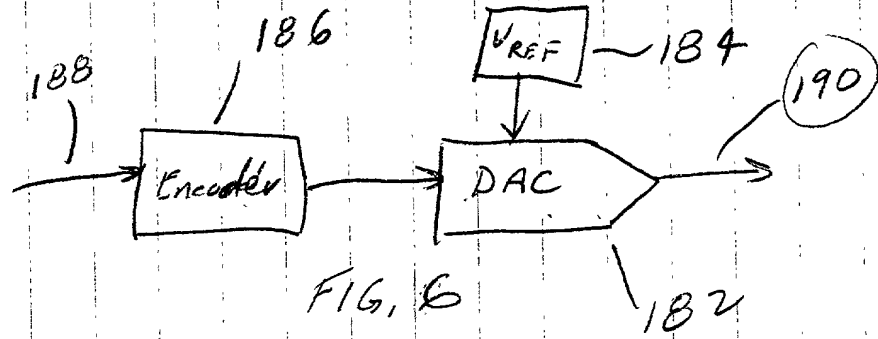
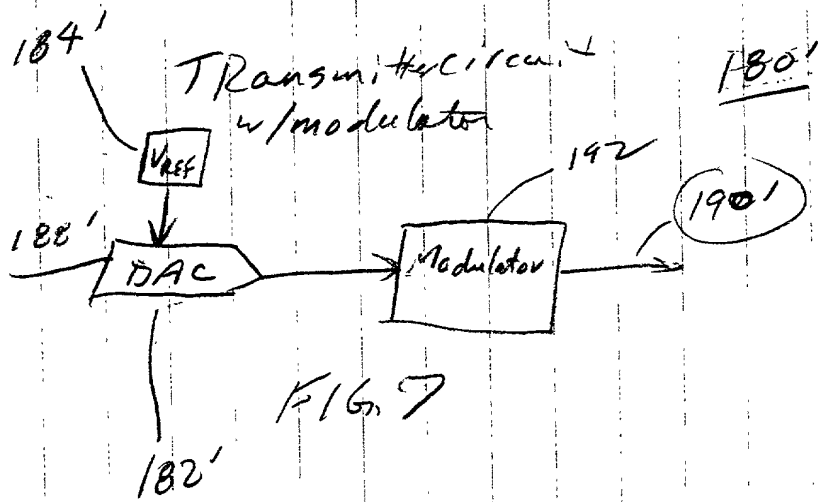


FIG. 5

Transmitter circuit  
w/ encoder

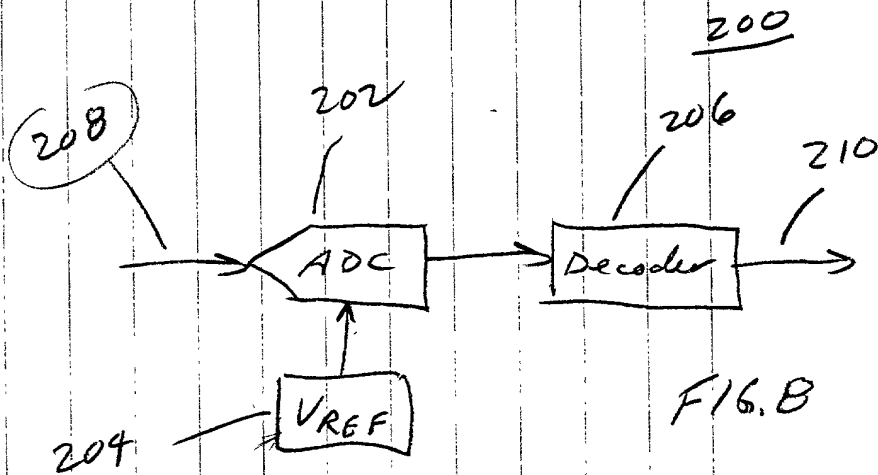


Transmitter circuit  
w/ modulator

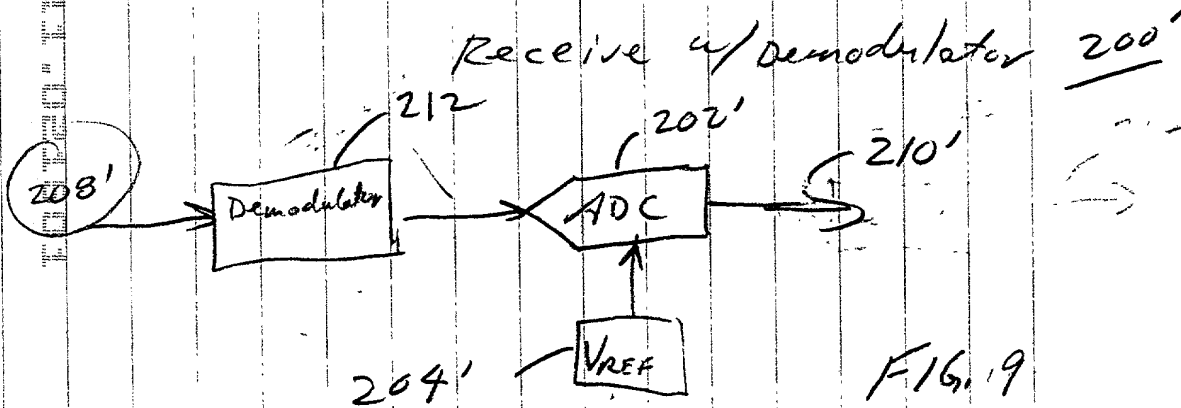


688

Receive u/decoder



Receive u/demodulator



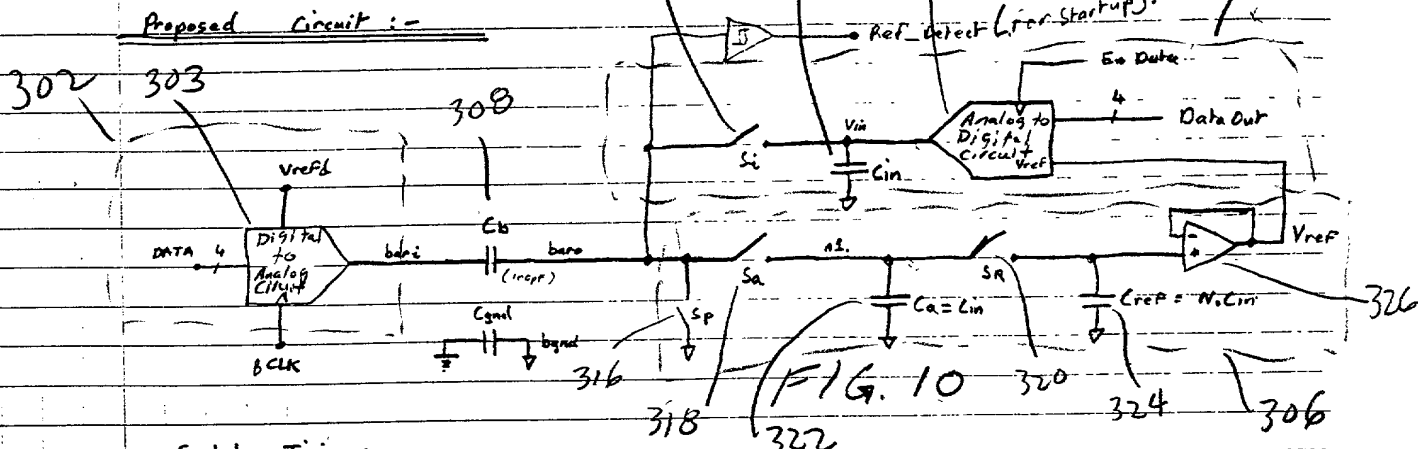
7088

Apr. 15, 1999

ADSL Barrier Communication

300

304



Switch Timing :-

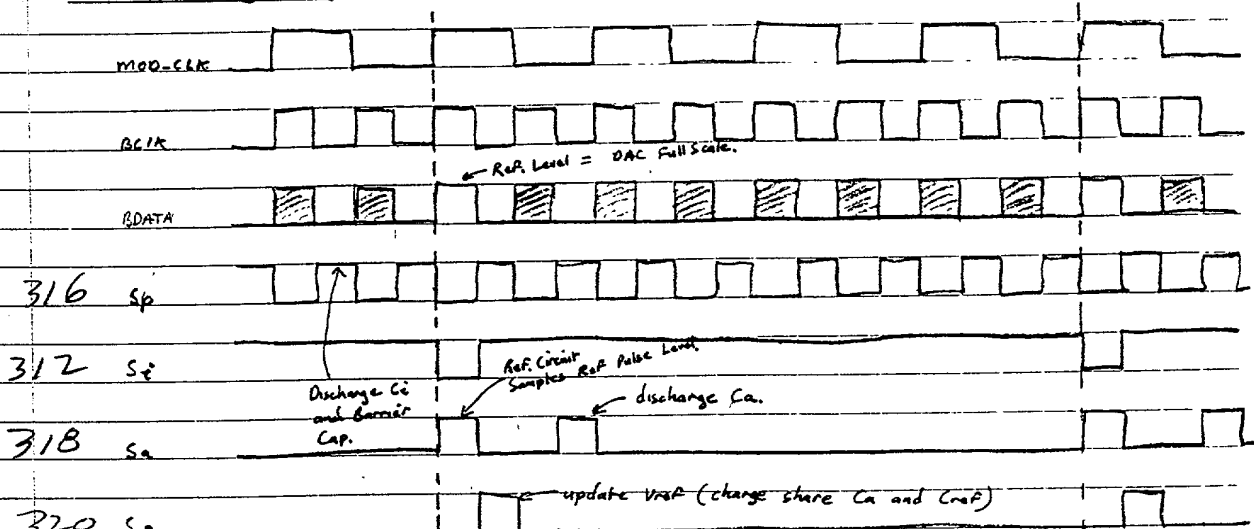


Fig. 11

~~Cref is chosen to be  $N \times Ca$ . This means that Vref is a moving average of the previous N Ref pulses. This allows some immunity to 'dud' Ref pulses. Without averaging, a 'dud' Ref pulse could wipe out successive data cycles. For a 4-bit converter, N should be greater than or equal to 16. This allows any Ref errors to be less than 1% on LSB size. The exact value of N is not terribly important.~~

WITNESSED AND UNDERSTOOD

SIGNED

SIGNED

DATE

DATE

SIGNED

DATE

020

300'

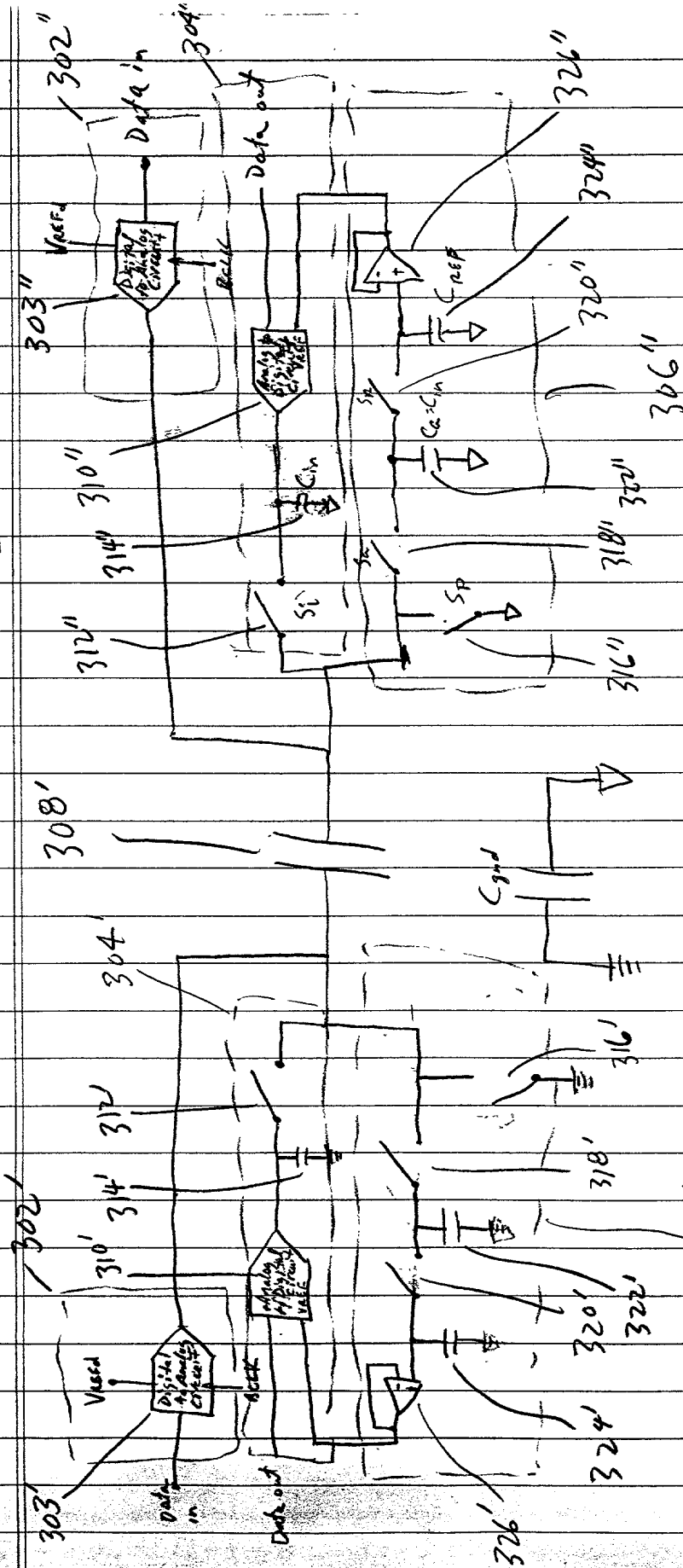


FIG. 12